

REMARKS

This is a response to the Office Action mailed on January 21, 2003. Claims 1, 37, 42-44 and 61-63 are pending in the application. Claims 1-3, 5, 7, 37 and 40-44 have been rejected by the Examiner. As noted above, Applicants have canceled Claims 2-36, 38-41 and 45-60, amended Claims 1, 37 and 42-44 and submitted New Claims 61-63. The amendments and New Claims 61-63 are fully supported by the written description. Also, no new matter has been introduced into the application.

Election/Restrictions

Applicants affirm election of Species II, including Claims 1-3, 5, 7, 37 and 40-44. Applicants have canceled Claims 4, 6, 8-36, 38, 39 and 45-60 without prejudice.

Claim Rejections – 35 USC § 112

The Examiner has rejected Claims 2, 3, 5 and 7 under 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants have canceled Claims 2, 3, 5 and 7 without prejudice.

Claim Rejections – 35 USC § 102**A. Burkoth et al.—Claims 1-3, 5, 7 and 42-44**

The Examiner has rejected Claims 1-3, 5, 7 and 42-44 under 35 U.S.C. § 102(b) as being anticipated by Burkoth et al. (WO 98/23228). Burkoth et al. is directed to “a directional drug delivery stent which includes an elongated or tubular member having a cavity containing a biologically active agent” (abstract). Burkoth et al. disclose that “[a]t least one cavity is formed within the main body of the elongated member for containing at least one biologically active agent, and delivery means are located in only a portion of the circumference of the elongated

member for directionally delivering the at least one biologically active agent from the cavity to an exterior of the elongated member” (page 3, lines 24-29).

According to the Federal Circuit, “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631 (Fed. Cir. 1987). Burkoth et al. clearly fail to disclose all of the elements of amended Claim 1, including a prosthesis comprising a coating deposited on a structure, **“wherein said coating is deposited by positioning a nozzle in close proximity to or in slight contact with said structure, moving said nozzle along a pattern selected by a user while maintaining said nozzle in close proximity to or in slight contact with said structure, and depositing a coating substance on said structure.”** In particular, Burkoth et al. at least fail to disclose a coating that is deposited by **“positioning a nozzle in close proximity to or in slight contact with said structure,”** and **“moving said nozzle along a pattern selected by a user while maintaining said nozzle in close proximity to or in slight contact with said structure.”** Accordingly, Claim 1 is allowable over Burkoth et al. Claims 42-44 depend directly or indirectly from Claim 1, and are allowable for at least the same reason. Claims 2, 3, 5 and 7 have been canceled without prejudice.

B. Ragheb et al.—Claims 1, 37 and 40-41

The Examiner has rejected Claims 1, 37 and 40-41 under 35 U.S.C. § 102(b) as being anticipated by Ragheb et al. (USPN 5,873,904). Ragheb et al. is directed to an implantable device having a bioactive material layer posited on one surface of the device and at least one porous layer posited over the bioactive material layer (see abstract). Ragheb et al. disclose that the layer can be applied by vapor deposition, or spraying or immersing the device in a solution (see Col. 13, line 66 to Col. 14, line 17). It is clear, however, that Ragheb et al. fail to disclose a prosthesis comprising a coating deposited on a structure, **“wherein said coating is deposited by positioning a nozzle in close proximity to or in slight contact with said structure, moving**

said nozzle along a pattern selected by a user while maintaining said nozzle in close proximity to or in slight contact with said structure, and depositing a coating substance on said structure” as recited by amended Claim 1. In particular, Ragheb et al. at least fail to disclose a coating that is deposited by “positioning a nozzle **in close proximity to or in slight contact with said structure,**” and “moving said nozzle along a pattern selected by a user **while maintaining said nozzle in close proximity to or in slight contact with said structure.**”

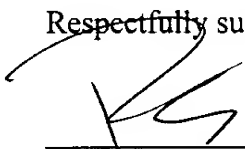
Because Ragheb et al. do not disclose the novel elements of amended Claim 1, Claim 1 is allowable over Ragheb et al. Claims 37 and 40-41 depend directly or indirectly from Claim 1, and are allowable for at least the same reason.

CONCLUSION

Claims 1, 37, 42-44 and 61-63 are pending in this application. Examination and allowance of the claims are respectfully requested. If the Examiner has any questions or concerns, the Examiner is invited to telephone the undersigned attorney at (415) 954-0345.

Date: June 23, 2003
Squire, Sanders & Dempsey L.L.P.
One Maritime Plaza, Suite 300
San Francisco, CA 94111
Telephone (415) 954-0200
Facsimile (415) 393-9887

Respectfully submitted,



Paul J. Meyer, Jr.
Attorney for Applicants
Reg. No. 47,791

Version With Markings To Show Changes Made

IN THE SPECIFICATION

Please amend the specification as indicated below.

Please amend the paragraph beginning on page 1, line 19 as follows:

A1
Percutaneous transluminal coronary angioplasty (PTCA) is a procedure for treating heart disease. A catheter assembly having a balloon portion is introduced percutaneously into the cardiovascular system of a patient via the brachial or femoral artery. The catheter assembly is advanced through the coronary vasculature until the balloon portion is positioned across the occlusive lesion. Once in position across the lesion, the balloon is inflated to a predetermined size to radially compress against the atherosclerotic plaque of the lesion ~~against~~ for remodeling the ~~inner wall of the artery to dilate the lumen vessel~~. The balloon is then deflated to a smaller profile to allow the catheter to be withdrawn from the patient's vasculature.

Please amend the paragraph beginning on page 5, line 13 as follows:

A2
Figure 1 illustrates a typical set-up of components which may be used to form a coating onto a surface of a prosthesis according to an aspect of the present invention.

Please amend the paragraph beginning on page 19, line 16 as follows:

A3
Exposure of composition 10 to the therapeutic substance ~~is~~ should ~~not permitted to~~ adversely alter the therapeutic substance's composition or characteristic. Accordingly, the particular therapeutic substance is selected for mutual compatibility with composition 10.

Therapeutic substances or agents may include, but are not limited to, antineoplastic, antimitotic,

antiinflammatory, antiplatelet, anticoagulant, antifibrin, antithrombin, antiproliferative, antibiotic, antioxidant, and antiallergic substances as well as combinations thereof. Examples of such antineoplastics and/or antimitotics include paclitaxel (e.g., TAXOL® by Bristol-Myers Squibb Co., Stamford, Conn.), docetaxel (e.g., Taxotere®, from Aventis S.A., Frankfurt, Germany), methotrexate, azathioprine, vincristine, vinblastine, fluorouracil, doxorubicin hydrochloride (e.g., Adriamycin® from Pharmacia & Upjohn, Peapack NJ), and mitomycin (e.g., Mutamycin® from Bristol-Myers Squibb Co., Stamford, Conn.). Examples of such antiplatelets, anticoagulants, ~~antifibrin~~antifibrins, and antithrombins include sodium heparin, low molecular weight heparins, heparinoids, hirudin, argatroban, forskolin, vapiprost, prostacyclin and prostacyclin analogues, dextran, D-phe-pro-arg-chloromethylketone (synthetic antithrombin), dipyridamole, glycoprotein IIb/IIIa platelet membrane receptor antagonist antibody, recombinant hirudin, and thrombin inhibitors such as Angiomax™ (Biogen, Inc., Cambridge, Mass.). Examples of such cytostatic or antiproliferative agents include angiopeptin, angiotensin converting enzyme inhibitors such as captopril (e.g., Capoten® and Capozide® from Bristol-Myers Squibb Co., Stamford, Conn.), cilazapril or lisinopril (e.g., Prinivil® and Prinzide® from Merck & Co., Inc., Whitehouse Station, NJ); calcium channel blockers (such as nifedipine), colchicine, fibroblast growth factor (FGF) antagonists, fish oil (omega 3-fatty acid), histamine antagonists, lovastatin (an inhibitor of HMG-CoA reductase, a cholesterol lowering drug, brand name Mevacor® from Merck & Co., Inc., Whitehouse Station, NJ), monoclonal antibodies (such as those specific for Platelet-Derived Growth Factor (PDGF) receptors), nitroprusside, phosphodiesterase inhibitors, prostaglandin inhibitors, suramin, serotonin blockers, steroids, thioprotease inhibitors, triazolopyrimidine (a PDGF antagonist), and nitric oxide. An example of an antiallergic agent is permirolast potassium. Other therapeutic substances or agents which may be ~~appropriate~~used include alpha-interferon, genetically engineered epithelial cells, and dexamethasone. ~~While the foregoing therapeutic substances or agents are well known for their preventative and~~

17
cont.

*A3
cont.*
~~treatment properties, the~~ The substances or agents are provided by way of example and are not meant to be limiting. Other therapeutic substances which are currently available or may be developed are equally applicable for use with the present invention. The treatment of patients using the above mentioned medicines is well known to those of ordinary skill in the art.

IN THE CLAIMS

Please amend the claims as indicated below.

1. (Amended) A prosthesis comprising:

(a) a ~~generally tubular~~ structure; and

(b) a coating deposited on ~~at least an area of a surface of said generally tubular structure;~~ wherein said coating ~~has a preselected geometrical pattern~~ is deposited by positioning a nozzle in close proximity to or in slight contact with said structure, moving said nozzle along a pattern selected by a user while maintaining said nozzle in close proximity to or in slight contact with said structure, and depositing a coating substance on said structure.

Please cancel Claims 2-36.

37. (Amended) The prosthesis of Claim 1, wherein said ~~generally tubular~~ structure is a stent having a plurality of struts and wherein said ~~coating having said preselected geometrical pattern is deposited on at least a portion of at least one strut of said plurality of struts~~ moving said nozzle comprises moving said nozzle along a segment of a strut of said stent.

Please cancel Claims 38-41.

42. (Amended) The prosthesis of Claim 1, wherein said coating substance comprises at least one polymer.

43. (Amended) The prosthesis of Claim 42, wherein said coating substance additionally comprises at least one therapeutic substance.

44. (Amended) The prosthesis of Claim 1, wherein said coating substance comprises at least one therapeutic substance.

Please cancel Claims 45-60.

Please add the following New Claims:

61. (New) A prosthesis comprising:

(a) a structure; and

(b) a coating deposited on said structure, wherein said coating is deposited by positioning said structure in close proximity to or in slight contact with a nozzle, moving said structure along a pattern selected by a user while said structure is maintained in close proximity to or in slight contact with said nozzle, and depositing a coating substance on said structure.

AY
CMT

62. (New) The prosthesis of Claim 61, wherein said structure is a stent.

63. (New) The prosthesis of Claim 61, wherein said coating substance comprises a polymer, or a therapeutic substance, or a combination of a polymer mixed with a therapeutic substance.